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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,758	07/15/2003	Dekel Tzidon	P-6038-US	6948
27130	7590	06/29/2004	EXAMINER	
EITAN, PEARL, LATZER & COHEN ZEDEK LLP 10 ROCKEFELLER PLAZA, SUITE 1001 NEW YORK, NY 10020			TRA, TUYEN Q	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AM

Office Action Summary	Application No.	Applicant(s)	
	10/618,758	TZIDON ET AL.	
	Examiner	Art Unit	
	Tuyen Q Tra	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0703</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The declaration filed 07/15/03 is acceptable.

Drawings

2. The Drawings filed on 07/15/03 have been declared formal by the examiner.

Claim Objections

3. Claim 1 objected to because of the following informalities:

Claim 1 recites “capable of” in line 3. It has been held that the recitation the element is “capable of” performing a function is not positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites “the lens” in line 3. There is insufficient antecedent basis for this limitation.

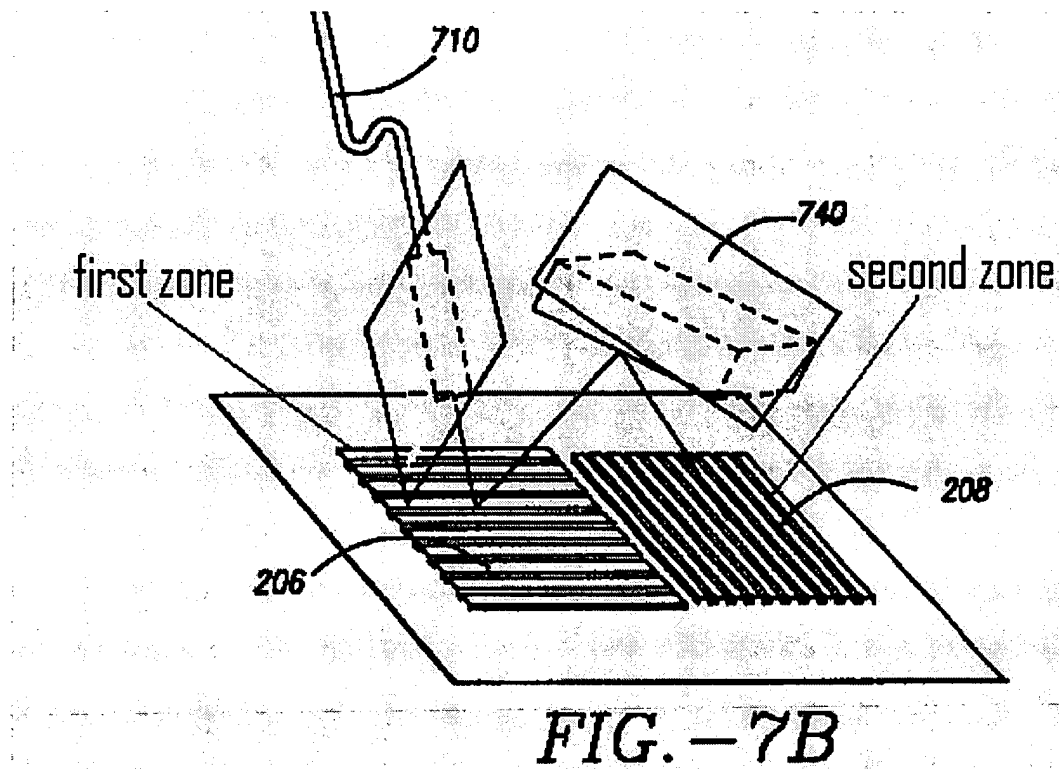
Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4-7, 9, 10, 12-15 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldil et al. (U.S. Pat. 6,268,952 B1).

a) With respect to claims 1 and 17, Goldil et al. discloses apparatus and method of a micromechanical light steering optical switch in Figures 3A, B and 7B comprising of at least two of a plurality of zones (item 206, 208) of separately controllable tiltable reflecting elements, each of the tiltable reflecting elements (item 210) of a zone being operable for tilting about an axis of predetermined tilt orientation associated with the zone between a first reflecting position reflecting an incident beam from (710) to a predetermined first direction (on direction), and a second reflecting position reflecting the incident beam to a predetermined second direction (off direction), each of said at least two of a plurality of zones having a predetermined off direction for all the reflecting elements in that zone (i.e. zone 206 has reflection on x-axis), that is different from the off direction (i.e. zone 208 has reflection on y-axis) of at least one other zone of said at least two of a plurality of zones (col. 8, lines 5-20).



- b) With respect to claims 2 and 10, Goldil et al. further discloses wherein said at least two of a plurality of zones comprise two zones;
- c) With respect to claims 4, 12 and 19, Goldil et al. discloses apparatus and further with method wherein the predetermined tilt orientation for all the reflecting elements in a zone is orthogonal to the tilt orientation of the one other zone of said at least two of a plurality of zones.
- c) With respect to claims 5, 6, 13 and 14, Goldil et al. further discloses wherein wherein said at least two of a plurality of zones are adjacent each other; wherein each reflecting element is electrically actuated, being separately controlled by a control unit (each of zone 206 and 208 are controlled separately).

- d) With respect to claims 7 and 15, Goldil et al. further discloses wherein a lens is further provided in front of the array in a predetermined distance from the array, placed in the on direction of all the reflecting elements, of the plurality of zones;
- e) With respect to claims 9 and 18, Goldil et al. discloses apparatus and further with method wherein each of said at least two of a plurality of zones having a predetermined tilt orientation for all the reflecting elements in that zone, that is different from the tilt orientation of at least one other zone of said at least two of a plurality of zones.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldil et al. (U.S. Pat. 6,268,952 B1) as applied respectively to the claims 1 and 17 above.

Goldil et al. discloses apparatus and method of a micromechanical light steering optical switch in Figures 3A, B and 7B comprising of at least two of a plurality of zones (item 206, 208) of separately controllable tiltable reflecting elements. However, Goldil et al. does not disclose wherein said at least two of a plurality of zones comprise four zones.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have plurality of similar zones to the micromirror array, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Allowable Subject Matter

9. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The reason for the indication of allowable subject matter is that a normal of a given reflecting element in a zone of said at least two of a plurality of zones, when the reflecting element is positioned in the off direction coincides at a point on a plane adjacent the lens with a normal of a corresponding reflecting element in one other zone of said at least two of a plurality of zones, when the corresponding reflecting element is positioned in the off direction disclosed in the claims is not found in the prior art.


Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Tra whose telephone number is (571) 272-2343. The examiner can normally be reached on Monday to Thursday from 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps, can be reached on (571) 272 - 2328. The fax number for this Group is (703) 872-9306.

tt

June 24, 2004


Georgia Epps
Supervisory Patent Examiner
Technology Center 2800